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ORBIT OF THE SPECTROSCOPIC BINARY 19 LYNCIS

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This star ( $\alpha = 7^{\text{h}} 14^{\text{m}}.7$ ,  $\delta = +55^{\circ} 28'$ , visual magnitude 5.61, type B8) was announced as a spectroscopic binary by Adams in the *Astrophysical Journal*, volume XXXV, page 175, from measures of three plates which are given in the table below. He stated that both spectra were present. Eight plates were made here in 1915, which gave the period approximately, and then the star was temporarily dropped from our list as it was understood that its orbit was being worked up at another observatory. It was since thought advisable to secure more plates and complete the orbit, and thirty of the thirty-seven plates whose measures follow have been used in the determination. The other seven are too uncertain by reason of the overlapping of the spectra. While the second spectrum shows occasionally on our plates, the measures of it were felt to be too unreliable to be used in the determination, and the elements obtained depend wholly on the measures of the lines due to the primary component.

TABLE OF MEASURES OF 19 LYNCIS

Plate	Date	Julian Date	Phase	Velocity	Weight	O-C
	1910					
Mt. Wilson	Dec. 23 .....	2,419,029.965	0.593	- 80	.....	-15.
	1911					
"	Jan. 11 .....	048.986	1.537	+ 90	.....	-16.
"	Jan. 17 .....	054.917	0.689	- 6	.....	.....
	1915					
6697	Jan. 8 .....	2,420,506.919	2.028	+ 10	4	- 3.
6705	" 10 .....	508.772	1.622	+116	4	+13.
6712	" 12 .....	510.841	1.431	+113	3	+ 8.
6716	" 15 .....	513.917	2.247	- 61	2	- 5.
6737	" 25 .....	523.857	0.880	+ 8	3	$\pm 0$ .
6746	" 27 .....	525.827	0.600	- 62	2	+ 1.
6752	" 28 .....	526.840	1.613	+ 95	3	- 8.
6770	Feb. 3 .....	532.839	0.833	$\pm 0$	3	+ 2.
	1916					
7971	Dec. 29 .....	2,421,227.765	2.062	+ 15	2	+13.

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